

ELHAM RAJAEI

January 5, 2002

Bushehr, Iran

+98 (917) 905-4907

elhamrajaei2002@gmail.com

Education

B.Sc. in Mechanical engineering GPA: 3.81 (18.37 out of 20)

[Islamic Azad University \(IAU\)](#), Bushehr, Iran [QS 394](#) [QS 2 in Iran](#)

Thesis title: The Performance of Various Types of Fuel Cells in Hybrid Vehicles

Supervisor: Dr. Mehdi Nakisa

2020 – 2024

Research Interests

- Renewable energy systems and alternative fuels
- Computational fluid dynamics (CFD) and its applications
- Combustion modeling and engine performance optimization
- Ship propulsion systems and design optimization
- Power generation and energy storage system
- Offshore engineering / Hybrid vehicle design

SolidWorks ANSYS FLUENT COMSOL Multiphysics MATLAB AutoCAD

Teaching Experience

Islamic Azad University

Problem-solving class for the lesson on resistance of materials

Eng. Rasoul Dashtiari

September 2022

Teaching assistant in a physics laboratory for 1st and 2nd-semester students

Dr. Hamid Vanaee

September 2021

Mehr Observatory of Bushehr

Voluntary teaching of astronomy and astrophysics

2017 - 2019

Work Experience

Mechanical Engineer at the Heavy-duty Vehicles Inspection Center

From April

Repairs of vessels in Bushehr port

August 2022

Apprenticeship in the section of repairs, maintenance, and inspection of Vessels

Research Experience

The review Performance of Various Types of Fuel Cells in Hybrid Vehicles

Prof. Mehdi Nakisa

Aluminum hardness test project, comparison of laboratory results and COMSOL

Multiphysics software and high strength alloy manufacturing

Cooperation with the Mechanical Department of [Persian Gulf University](#)

Award & Honors

1st GPA rank in the Mechanical Engineering Department in 2023

I will be the first to graduate from the incoming class of 2020 in the Department of

Mechanical Engineering

Received a full scholarship in Iranian university entrance examination for

JUNDI-SHAPUR University of Technology

Middle school and high school education at the high school of

[National Organization for Development of Exceptional Talents](#)

Courses, Conferences & Certificate

Advanced industrial plumbing and fluids with an internationally recognized certificate 2024

Participation in the Iran Mechanics Conference 2023

Participating in the course and obtaining a degree in SolidWork software 2021

Obtaining the HSE certificate at Persian Gulf University 2021

References

[Prof. Mohammad Hadi Atabekzadeh](#)

Dean of Technical and Engineering Faculty

Islamic Azad University, Bushehr, Iran

Email: mh_atabak@yahoo.com

Phone: +98 (917) 378-5167

[Dr. Mehdi Nakisa](#)

Assistant Professor

Islamic Azad University, Bushehr, Iran

Email: mnakisa2003@yahoo.com

Phone: +98 (917) 173-1664

Publications

Rajaei E., (2023). The Performance of Various Types of Fuel Cells in Hybrid

Vehicles. (Presented at the Iran Mechanical Engineering Conference 2023)

[Poro A., Rajaei E. and others. \(No. 7, 2020\). Analysis of Observational Parameters in](#)

[the Timing Accuracy of Lunar Occultations.](#) Journal of Occultation and Eclipse (JOE)



Top Scores (out of 20)

Dynamic: **20** CFD: **20**

Automatic control: **19**

Hydraulic and pneumatic systems: **20**

Fluid Mechanics Laboratory: **20**

Engineering Mathematics: **19**

Refrigeration systems design: **20**

English & GRE Tests

TOEFL: **83**

Other Related Courses

Machine learning

MATLAB in mechanical engineering

Python programming

Photoshop and ICDL

Hobbies

Professional Swimmer

Amateur diver

And lifeguard training

Undergoing swimming coaching

Astronomer

Esmail Foladi

Director of the Bushehr Vehicle

Inspection Center

Phone: +98 (939) 549-5838